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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/690,527	10/23/2003	Takahiro Iwahama	3273-0182P	6374

2292 7590 01/28/2008

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EXAMINER	
KEYS, ROSALYND ANN	
ART UNIT	**PAPER NUMBER**
1621	

NOTIFICATION DATE	DELIVERY MODE
01/28/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No.	Applicant(s)	
	10/690,527	IWAHAMA ET AL.	
	Examiner	Art Unit	
	Rosalynd Keys	1621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 October 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-8,10 and 12* is/are pending in the application.

4a) Of the above claim(s) *3,5 and 6* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 and 7* is/are rejected.

7)☒ Claim(s) *4, 8, 10 and 12* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Status of Claims

1. Claims 1, 3-8, 10, and 12 are pending.

Claims 1 and 7 are rejected.

Claims 4, 8, 10 and 12 are objected.

Claims 3, 5 and 6 are withdrawn.

Claims 2, 9, 11 and 13 are cancelled.

Election/Restrictions

2. Claims 3, 5 and 6 remain withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on July 14, 2005.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claim 7 is rejected under 35 U.S.C. 102(b) as being anticipated by Sharetts et al. (US 3,215,665).

Sharetts et al. teach compounds having the claimed formula (1a), see for example column 4, lines 8-9, wherein the compounds 2,2'-dihydroxy-4-vinyloxy benzophenone, and the compound 2-hydroxy-4, 4'-divinyloxyphenyl-phenone are disclosed. These are compounds of the claimed invention wherein W is carbonyl, p is 2 and q is 1.

5. Claim 7 is rejected under 35 U.S.C. 102(b) as being anticipated by Hardy et al. (US 2,962,533), for the reasons given in the previous office action, mailed July 26, 2007.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cinque et al. (J. Med. Chem., April 1998, Vol. 41, No. 9, pp. 1540-1554), for the reasons given in the previous office action, mailed July 26, 2007.

10. Claim 7 is rejected under 35 U.S.C. 103(a) being unpatentable over Hardy et al. (US 2,962,533), for the reasons given in the previous office action, mailed July 26, 2007.

Response to Amendment

11. The rejection of claim 9 under 35 U.S.C. 102(b) as being anticipated by Sharetts et al. (US 3,215,665) is withdrawn, since this claim has been cancelled.

12. The rejection of claim 13 under 35 U.S.C. 102(b) as being anticipated by Kurisu et al. (JP 62056187) is withdrawn, since this claim has been cancelled.

13. The rejection of Claim 11 under 35 U.S.C. 103(a) as being unpatentable over Kanayama et al. (JP 05051418) is withdrawn, since this claim has been cancelled.

14. The rejection of Claim 7 under 35 U.S.C. 102(b) as being anticipated by Sharetts et al. (US 3,215,665) is withdrawn, due to the amendment to claim 7 requiring that when W is carbonyl, p=2 and q=0, then both Rs must be represented by the Formula (3).

15. The rejection of claim 7 under 35 U.S.C. 102(b) as being anticipated by Kurisu et al. (JP 62056187) is withdrawn, due to the amendment to claim 7 requiring that when q is 1 and p is 1 any one of R and R' is a group represented by the Formula (3) and the other is H.

16. The rejection of claim 7 under 35 U.S.C. 102(b) as being anticipated by Kanayama et al. (JP 05051418) is withdrawn, due to the amendment to claim 7 requiring that when q is 1 and p is 1 any one of R and R' is a group represented by the Formula (3) and the other is H.

17. The rejection of claim 7 under 35 U.S.C. 103(a) as being unpatentable over Kanayama et al. (JP 05051418) is withdrawn, due to the amendment to claim 7 requiring that when q is 1 and p is 1 any one of R and R' is a group represented by the Formula (3) and the other is H.

Response to Arguments

Rejection of claim 1 under 35 U.S.C. 103(a) as being unpatentable over Cinque et al. (J. Med. Chem., April 1998, Vol. 41, No. 9, pp. 1540-1554)

18. Applicant's arguments filed October 26, 2007 have been fully considered but they are not persuasive. The Applicants argue that Cinque does not disclose or suggest a compound wherein W is a sulfur atom containing a vinyl ether group. The Examiner disagrees. In the first full paragraph, right column on page 1542, Cinque teaches that to investigate the influence of the oxygen atom between the phenyl groups on the biological activity, it was decided to replace it by a sulfur atom. Hence Cinque obtained compound 48. In the first full paragraph, left column on page 1543, Cinque teaches that as the allyl group is frequently found in drugs with high inhibitory action, it was interesting to study the biological activity of its isomer vinyl ether (compound 52). Both of these teachings in Cinque involve modification to the same basic compound. With said modification being replacement of oxygen for sulfur between the two phenyl rings and replacement of the allyloxy group with a vinyloxy group. Thus, the Examiner believes that based upon this teaching one having ordinary skill in the art at the time the invention was made would have found it obvious to either modify compound 52 by replacing the oxygen between the two phenyl rings with a sulfur or modify compound 47 by replacing the ally ether group with a vinyl ether group. Thus obtaining the instant claimed compound, i.e. a compound with sulfur between the two phenyl rings and a vinyl group attached to the oxy group.

Rejection of claim 7 under 35 U.S.C. 102(b) as being anticipated by or under 35 U.S.C. as being unpatentable over Hardy et al. (US 2,962,533)

19. Applicant's arguments filed October 26, 2007 have been fully considered but they are not persuasive.

The Applicants argue that in the two Rs (R being denoted in the same way as the present

invention, one is a hydrogen atom and the other is a vinoxyethyl group and not a vinoxy group (the Applicants point to column 3, line 12). However, the Examiner disagrees because a vinoxy group is taught in column 3, line 21.

The Applicants argue that additionally in Applicants' claim 1, q is 0 or 1, not 2. This argument is not persuasive because in the compound disclosed by Hardy et al. q is 1. The allyloxy group that is present on the ring with q is the additional substitution that Applicants claim that the benzene rings shown in the formula may each have.

For the above reasons these rejections are maintained.

Allowable Subject Matter

20. Claims 4, 8, 10 and 12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

21. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be

calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

22. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rosalynd Keys whose telephone number is 571-272-0639. The examiner can normally be reached on M, R & F 5:30-7:30 am & 1-5 pm; T & W 5:30 am-4 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yvonne Eyler can be reached on 571-272-0871. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Rosalynd Keys/
Primary Examiner
Art Unit 1621

January 22, 2008